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Re:

U.S. Patent Application No. 09/889,167

Attorney Docket No. 43888-112 Confirmation Number: 7945

Group Art Unit: 3729

Message:

This Appeal Brief (\$500) is being filed in support of the Notice of Appeal filed October 11, 2006

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PAGE 1/15 \* RCVD AT 2/28/2007 11:55:17 PM [Eastern Standard Time] \* SVR:USPTO-EFXRF-3/20 \* DNIS:2738300 \* CSID:2027568087 \* DURATION (mm-ss):04-06

## RECEIVED **CENTRAL FAX CENTER**

Docket No.: 043888-0112

FEB 2 8 2007

PATENT

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of

Customer Number: 20277

Kenichiro SUETSUGU, et al.

Confirmation Number: 7945

Application No.: 09/889,167

Tech Center Art Unit: 3729

Filed: July 11, 2001

Examiner: Thiem D. Phan

For: ARTICLE HAVING A CIRCUIT SOLDERED WITH PARTS AND METHOD FOR

RECYCLING WASTES OF THE SAME

#### TRANSMITTAL OF APPEAL BRIEF

Mail Stop Appeal Brief Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Submitted herewith is Appellant's Appeal Brief in support of the Notice of Appeal filed October 11, 2006. Please charge the Appeal Brief fee of \$500.00 to Deposit Account 500417.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due under 37 C.F.R. 1.17 and 41.20, and in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

McDERMOTT WILL & EMERY LLP

Ramyar M. Farid Registration No. 45,692

600 13th Street, N.W. Washington, DC 20005-3096 Phone: 202.756 8000 RMF:MWE

Facsimile: 202,756,8087 Date: February 28, 2007

WDC99 1356051-1,043888,0112

Please recognize our Customer No. 20277 as our correspondence address.

# RECEIVED CENTRAL FAX CENTER

Docket No.: 043888-0112

FEB **2 8** 2007

**PATENT** 

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RECYCLING WASTES OF THE SAME

### APPEAL BRIEF

Mail Stop Appeal Brief Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

This Appeal Brief is submitted in support of the Notice of Appeal filed October 11, 2006, wherein Appellant appeals from the Primary Examiner's rejection of claims 6, 8, 14 and 21.

#### Real Party In Interest

This application is assigned to Matsushita Electric Industrial Co., Ltd. by assignment recorded on July 11, 2001, at Reel 012123, Frame 0088.

#### Related Appeals and Interferences

To the best of Applicants' and Applicants representatives' knowledge, there are no related appeals or interferences.

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WDC99 1356051-1,043818,0112

PAGE 3/15 \* RCVD AT 2/28/2007 11:55:17 PM [Eastern Standard Time] \* SVR:USPTO-EFXRF-3/20 \* DNIS:2738300 \* CSID:2027568087 \* DURATION (mm-ss):04-06

#### Status of Claims

Claims 6, 8, 11-14 and 21 are pending, with claims 11-13 being withdrawn from consideration. Claims 6, 8, 14 and 21 stand rejected.

#### Status of Amendments

No After-Final amendments were made to the claims. This appeal is taken from the final Office Action dated July 11, 2006 which sets forth at least a second rejection of the present application.

### Summary of Claimed Subject Matter

One embodiment of the present invention is directed to an article (Figure 12; element 11 and/or 16) having a circuit with parts (Figures 12-13; unnumbered components on element 11), which are soldered by a lead free solder (page 9, lines 23-24), and identification information indicating presence of lead in said article when said article contains lead and indicating absence of lead in said article when said article does not contain lead (page 9, lines 21-22), said identification information carrying information about the type and composition of the solder, kind of soldered parts, and a material of said article (page 21, lines 1-6), said article having an IC (Figures 12-13; element 17) carrying said identification information.

## Grounds of Rejection To Be Reviewed By Appeal

Whether claims 6, 8, 14 and 21 would have been obvious under 35 U.S.C. § 103 over JP '834 in view of Nakaisuka et al. ("Nakatsuka"). Claims 6 and 8 are separately argued, with claims 14 and 21 standing or falling based thereon.

## INFORMATION DISCLOSURE STATEMENT FILED SEPTEMBER 12, 2006

It is noted that the Examiner has not provided an initialed copy of the Information

Disclosure Statement filed on September 12, 2006. It is respectfully requested that the Examiner provide Applicants, in the next Office Action, an initialed copy of the IDS indicating that each of the prior art references cited therein have been considered and made of record.

#### WITHDRAWN CLAIMS

Withdrawn independent claims 11 and 12 are submitted to be patentable for at least the reasons discussed below regarding claim 8. Accordingly, the Examiner and/or the Board is respectfully requested to rejoin claims 11-13 if the application is passed to issue.

#### Argument

Claims 6, 8, 14 and 21 stand rejected under 35 U.S.C. § 103 as being unpatentable over JP '834 in view of Naka:suka et al. ("Nakatsuka"). This rejection is respectfully traversed for the following reasons.

A. Meither JP '834 nor Nakatsuka, alone or in combination, disclose or suggest IC carrying claimed identification information

The Examiner relies on paragraph [0020] of JP '834 as allegedly disclosing an <u>IC</u> carrying the claimed identification information (i.e., information indicating presence of lead, type/composition of solder, kind of soldered parts, and material of article; see <u>page 20</u>, line 7 – page 21, line 17 of <u>Applicants' specification for exemplary advantages that can be made possible by use of an IC over, for example, a bar code as used in JP '834 (e.g., increased storage, etc.); and page 21, lines <u>18-22 corresponding to Figures 12-13 of Applicants' drawings for a description of exemplary embodiments of the IC arrangement</u>).</u>

However, it is respectfully submitted that the alleged IC of JP '834 is not configured to provide the information recited in the pending claims, but is simply a Timer IC recording such things as the date of manufacture, etc., to provide actual usage time. The alleged IC of JP '834 does not record the absence/presence of lead, etc., and indeed does not carry the claimed information about the solder (e.g., type and composition of solder, etc.). Rather, JP '834 expressly describes a simple bar code to indicate information regarding heavy metals and is silent as to the Timer IC, whereas the present invention can use an IC to record a much larger depth of information which can be freely and easily changed.

In response thereto, the Examiner merely alleges on page 2, last four lines of the outstanding Office Action) that JP '834 "do indeed suggest the IC carrying the identification information of anticipated parts: that can affect the environment ... and suggest mainly of the recycling of lead from the printed circuit board." It appears the Examiner is confusing what is recorded by the bar code of JP '834 with that which is stored by the Timer IC. JP '834 is completely silent as to the Timer IC recording the absence/presence of lead, etc., let alone the claimed information about the solder (e.g., type and composition of solder, etc). As discussed above, page 20, line 7 – page 21, line 17 of Applicants' specification expressly describes exemplary advantages that can be made possible by use of an IC over, for example, a bar code as used in JP '834 JP for indicating information regarding heavy metals. JP '834 does not disclose or suggest using the Timer IC for indicating anything about the heave metal content, etc., but at best merely indicates a date of manufacture to provide usage time.

B. Neither JP '834 nor Nakatsuka, alone or in combination, disclose or suggest identification information carrying information about the type and composition of the solder

The Examiner admits that JP '834 does not have identification information which carries information about the type and composition of the solder. The Examiner therefore relies on the

Abstract of Nakatsuka as allegedly teaching such information. The Examiner's reliance on Nakatsuka is not understood.

The relied on portion of Nakatsuka is completely silent as to marking products to identify the type and/or corr position of solder contained in the product. Nakatsuka merely discloses lead-free solder compositions per se (e.g., a catalog), but does not suggest marking the product in which the disclosed solder is used to identify the type and/or composition of the solder. The Examiner's attempt to take the "catalog of solder composition" teachings (disclosure of various types of solder) of Nakatsuka as suggestive of actually "marking" products is completely baseless. At best, the cited prior art may, for argument's sake, suggest using the lead-free solder compositions taught by Nakatsuka in the products disclosed by JP '834; but, the cited prior art does not suggest modifying the bar codes of JP '834 so that they carry information about the type and/or composition of the solder. Indeed, it appears that Nakatsuka is completely silent as to identifier-markings on products, let alone suggest markings that specifically identify the type and/or composition of the solder.

The Examiner has offered no evidence *from the prior art* that discloses or suggests an article having identification information which carries information about the type and/or composition of the solder. Indeed, only Applicants' specification discloses such a feature and the motivation for providing it within the particular combination recited in the claims.

C. Neither JP '834 nor Nakatsuka, alone or in combination, disclose or suggest identification information indicating presence of lead when the article or housing contains lead

With respect to this issue, the Examiner asserts that Applicants' arguments filed on December 27, 2004 are "gratuitous since Sn, Bi, ... are not claimed." However, Applicants never argued that Sn, Bi, ..., are claimed elements of the present invention. Rather, Applicants are trying to illustrate to the Examiner why JP '834's bar code is not *lead* identification information. JP '834's bar code identifies

heavy metal content, and the Examiner has improperly interpreted heavy metal as if it embodied only lead. This is clearly incorrect. Lead is just one type of heavy metal. Heavy metals include Sn, Bi, Au, Ag, etc.. Accordingly, when JP '834's bar code indicates that the article contains heavy metal, this does NOT necessitate that the article contains lead.

This sir ple question was posed to the Examiner during prosecution, which question has never been directly answered: if JP '834's bar code indicates heavy metal is contained in the article, does this mean that lead is contained in the article? Its presumed that the Examiner's answer to this question would be "yes" in view of the Examiner's continued position that JP '834 discloses "lead identification information." Indeed, the Examiner's answer would have to be "yes" to take the position that he has taken.

In contrast, it is Applicants' position that if JP '834's bar code indicates heavy metal is contained in the article, such indication does not mean that lead *must* be contained in the article.

Indeed, if JP '824's bar code indicates heavy metal is contained in the article, it is quite possible that no lead is contained in the article (e.g., heavy metal contained in article may simply be Sn, Bi, Au, and/or Ag, without lead). Accordingly, JP '834's bar code does not indicate lead information specifically as recited in the claims. It is noted that "inherency may not be established by probabilities or possibilities", Scaltech Inc. v. Retec/Tetra, 178 F.3d 1378 (Fed. Cir. 1999).

# D. Neither JP '834 nor Nakatsuka, alone or in combination, disclose or suggest that the housing carries the lead identification information

In addition, with respect to claim 8, the cited prior art further does not disclose or suggest that the housing carries he lead identification information. Rather, the bar code of JP '834 is attached on the surface of the printed board. To overcome this deficiency of JP '834, the Examiner merely alleges that it would have been obvious to have the bar code of JP '834 imprinted on the housing which accommodates the printed circuit boards or articles .... However, the Examiner has not provided any prior art to

support this allegation. Instead, the allegation is based entirely on improper hindsight reasoning. The Examiner has offered no prior art that discloses or suggests the aforementioned feature, and simply concludes such a feature is obvious based on the Examiner's own opinion. Indeed, only Applicants' specification discloses such a feature and the motivation for providing it within the particular combination recited in the claims.

The Examiner cites In re McLaughlin on page 6 of the February 22, 2005 Office Action as support that hindsight is sometimes proper. However, In re McLaughlin is not relevant to the instant case. As set forth in MPEP § 2145(X)(A), In re McLaughlin suggests that some hindsight may be proper as it pertains to the rationale for combining references. That is, if two references disclose all of the claim limitations, then there may be instances where the rationale to combine those references to reach the claimed invention may sometimes depend on some manner of hindsight.

In re McLaughlin does not support the position that limitations which are completely missing in the prior art can nonetheless be held to be obvious. In re McLaughlin therefore can not be relied on as a substitute to prior art for alleging obviousness of a limitation not otherwise disclosed in the prior art. In the instant case, the Examiner has improperly used In re McLaughlin as a substitute to prior art. That is, the Examiner has not produced prior art which discloses a housing that carries the lead identification information, so that the holding of In re McLaughlin is not relevant to, and can not be relied on in, the present case.

Pursuant to MPEP § 2144.03(C), Applicants hereby challenge the Examiner's allegation that it would have been obvious to have the lead identification information of JP '834 carried on the housing. Applicants <u>respectfully requested documentary evidence of his findings</u> if the Examiner were to maintain his position, but never received such evidence.

Based on all the foregoing, it is respectfully submitted that all pending claims are patentable over the cited prior art. Accordingly, it is respectfully requested that the rejection under 35 U.S.C. § 103 be withdrawn.

#### Conclusion

For all of the foregoing reason, Appellant respectfully submits that the grounds of rejection of the claims on appeal is in error and should be reversed. To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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Date: February 28, 2007

#### CLAIMS APPENDIX

- 6. An article having a circuit with parts, which are soldered by a lead free solder, and identification information indicating presence of lead in said article when said article contains lead and indicating absence of lead in said article when said article does not contain lead, said identification information carrying information about the type and composition of the solder, kind of soldered parts, and a material of said article, said article having an IC carrying said identification information.
- 8. An electrical appliance comprising an article having a circuit with parts soldered with a lead free solder and a housing accommodating said article, wherein said housing has an IC carrying identification information indicating presence of lead in said respective article or housing when said respective article or housing contains lead and indicating absence of lead in said respective article or housing when said respective article or housing does not contain lead, said identification information carrying information about the type and composition of the solder, kind of soldered parts, and a material of said article.
- 11. A recycling method of wastes containing an electrical appliance comprising an article having a circuit soldered with parts soldered with a lead free solder and a housing accommodating said article wherein said housing has an IC carrying identification information indicating presence of lead in said respective article or housing when said respective article or housing contains lead and indicating absence of lead in said respective article or housing when said respective article or housing does not contain lead, said identification information carrying information about the type and composition of the solder, kind of soldered parts, and a material of said article, said method comprising:

identifying wastes of lead free electrical appliance from those of various electrical appliances based on said identification information.

12. A recycling method of wastes of electrical appliance containing an article having a circuit soldered with parts soldered with a lead free solder and a housing accommodating said article wherein said housing has an IC carrying identification information indicating presence of lead in said respective article or housing when said respective article or housing contains lead and indicating absence of lead in said respective article or housing does not contain lead, said identification information carrying information about the type and composition of the solder, kind of soldered parts, and a material of said article, said method comprising:

discriminating an article having a circuit soldered with lead free parts from an article having a circuit soldered with lead containing parts by means of said identification information,

recovering, grinding and melting each of discriminated articles to separate materials constituting the article,

recycling reusable valuables contained in said materials, and

shredding the rest of the article and burying the same or treating the same at a stabilizing dumping ground or a controlled dumping ground for disposal.

13. The recycling method of wastes of electrical appliance in accordance with claim 12, further comprising, before said discrimination:

classifying wastes of miscellaneous electrical appliances by the type of electrical appliance, identifying the presence or absence of lead by means of said identification information to discriminate a lead free electrical appliance from a lead containing article, and

disassembling each electrical appliance to remove an article having a circuit soldered with parts therefrom.

- 14. The article having a circuit soldered with parts in accordance with claim 6, wherein the identification information is recognizable by a human.
- 21. The electrical appliance in accordance with claim 8, wherein identification information includes a labeling carried on said housing.

## **EVIDENCE APPENDIX**

N/A

## RELATED PROCEEDINGS APPENDIX

To the best of Applicants' and Applicants representatives' knowledge, there are no related appeals or interferences.